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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/543,169

07/22/2005

Jouko Muona

47121-5015-00 (221889)

5477

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EXAMINER

WEEKS, GLORIA R

ART UNIT

PAPER NUMBER

3721

MAIL DATE

DELIVERY MODE

04/23/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/543,169	<b>Applicant(s)</b> MUONA ET AL.	
	<b>Examiner</b> GLORIA R. WEEKS	<b>Art Unit</b> 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is in response to the remarks received on December 19, 2008.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-15 and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagely (USPN 3,547,205).

In reference to claims 1-15 and 21-25, Nagely et al. discloses a hydraulic system and method of operating a hydraulic system, comprising: a tank (figure 5); and a plurality of operationally separate hydraulic circuits having pressure fluid channels 126, 128, 130, 150, 152, 174, each hydraulic circuit having a hydraulic pump 120, 122, 124 generating power to each hydraulic circuit; at least one power unit 20, 80 that actuate each hydraulic pump 120, 122, 124; a plurality of hydraulic mining actuators 22, 24 connected to the hydraulic circuit; a main hydraulic circuit and at least one separate hydraulic circuit are connected yet powered by separate pumps 120, 122, 124, such that the power of the mining actuator(s) 22, 24 are arranged to be adjusted by adjusting means 134, 148 in connection with the pumps 120, 122, 124 for the purpose of adjusting the hydraulic power, speed, or flow generated by the pumps 120, 122, 124 of the separate hydraulic circuit (column 4 lines 14-54).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 16-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Nagely (USPN 3,547,205) in view of Schivley, Jr. (USPN 5,449,047).

Regarding claims 16-18, Nagley discloses the claimed hydraulic system except for the provision of sensors that monitor the operation of the system. Schivley, Jr. teaches a hydraulic system including a control unit 100 that receives information from means of a sensor 110, where the information contributes to the monitoring of the volume flow from hydraulic pumps 102, 104, 106 in the hydraulic system (column 5 lines 41-52), such that the power of a mining actuator is arranged to be adjusted by adjusting means in connection with the pumps 102, 104, 106, in response to pressure sensing means, for the purpose of adjusting the hydraulic pressure, (which leads to calculation of power, force, and variables depicting the same) generated by the pumps 102, 104, 106. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the hydraulic system of Nagely to include sensor means as suggested by Schivley, Jr., since column 2 lines 22-25 state that such a modification results in higher drill productivity of the hydraulic circuit and better utilization of the drilling machine.

With respect to claims 19 and 20, Nagley discloses a hydraulic system and method of operating a hydraulic system, comprising: a tank (figure 5); a rock drill 64; and a plurality of operationally separate hydraulic circuits having pressure fluid channels 126, 128, 130, 150, 152,

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174, each hydraulic circuit having a hydraulic pump 120, 122, 124 generating power to each hydraulic circuit; at least one power unit 20, 80 that actuate each hydraulic pump 120, 122, 124; a plurality of hydraulic mining actuators 22, 24 connected to the hydraulic circuit; a main hydraulic circuit and at least one separate hydraulic circuit are connected yet powered by separate pumps 120, 122, 124, such that the power of the mining actuator(s) 22, 24 are arranged to be adjusted by adjusting means 134, 148 in connection with the pumps 120, 122, 124 for the purpose of adjusting the hydraulic power, speed, or flow generated by the pumps 120, 122, 124 of the separate hydraulic circuit (column 4 lines 14-54), but does not disclose at least one sensor in connection with the rock drill. Schivley, Jr. teaches a hydraulic system including a control unit 100 that receives information from means of a sensor 110, where the information contributes to the monitoring of the volume flow from hydraulic pumps 102, 104, 106 in the hydraulic system (column 5 lines 41-52), such that the power of a mining actuator is arranged to be adjusted by adjusting means in connection with the pumps 102, 104, 106, in response to pressure sensing means, for the purpose of adjusting the hydraulic pressure, (which leads to calculation of power, force, and variables depicting the same) generated by the pumps 102, 104, 106. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the hydraulic system of Nagely to include sensor means as suggested by Schivley, Jr., since column 2 lines 22-25 state that such a modification results in higher drill productivity of the hydraulic circuit and better utilization of the drilling machine.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to attachment for notice of references cited and recommended for consideration based on their disclosure of limitations related to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GLORIA R. WEEKS whose telephone number is (571)272-4473. The examiner can normally be reached on M-F 7am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Other helpful telephone numbers are listed for applicant's benefit:

- Allowed Files & Publication (888) 786-0101
- Assignment Branch (800) 972-6382
- Certificates of Correction (703) 305-8309
- Fee Questions (571) 272-6400
- Inventor Assistance Center (800) PTO-9199
- Petitions/special Programs (571) 272-3282
- Information Help line 1-800-786-9199

/Gloria R. Weeks/  
Examiner, Art Unit 3721

/Rinaldi I Rada/  
Supervisory Patent Examiner, Art Unit  
3721

April 23, 2009